# CE. Pieze

Tire Heater
195050 Patented March 3. 1868 Inventor Witnesses.

## Anited States Patent Pffice.

## C. E. PIERCE, OF ST. CHARLES, ILLINOIS.

Letters Patent No. 75,050, dated March 3, 1868.

#### IMPROVED TIRE-HEATER.

The Schedule referred to in these Retters Patent und making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, C. E. Pierce, of St. Charles, in the county of Kane, and State of Illinois, have invented a new and useful Improvement in Tire-Heater; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 is a front view of my improved tire-heater, the door being open. Figure 2 is a vertical section of the same, taken through the line x x, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of tire-heating apparatus, so as to lessen the cost of construction and use, and to increase the convenience of its use and the efficiency of its operation; and it consists in placing the tire-heater upon the ordinary forge, and making it a part of the forge and flue, in the arrangement of the damper and shifting-rollers, in the use of stop or guide-pins, and in attaching an apron to the lower part of the door or of the tire-box, the whole being constructed and arranged as hereinafter more fully described:

A represents an ordinary blacksmith's forge. B is the tire-box, which is a ring-shaped chamber built of brick, stone, or other suitable material, and which forms the flue of the forge, being built as a permanent part of the forge and chimney. C is a roller, pivoted in the upper part of the ring-shaped chamber, just above the inner side of said chamber. The smaller tires are hung over the roller C, and their position is shifted to insure all their parts being heated uniformly by revolving the roller C by means of a crank, D, formed upon or attached to one of its journals. The larger tires rest upon the roller E, pivoted in the lower part of the tire-box, and their position is shifted by revolving the said roller by means of the crank F, formed upon or attached to one of its journals. G is the door of the tire-box B, which is made of sheet iron, and to the lower edge of which, or to the lower part of the tire-box, is attached, or upon it is formed, an apron or hood, H, which extends over the fire and guides the flame and heat into the tire-box B. In the exit-flue, just above the exit-orifice of the tire-box B, is placed a damper, I, by which the draught may be regulated. J are removable pins, one or more of which are used, and which pass through the wall of the tire-box B, and project inward so as to keep the tires in their proper relative positions and prevent them from falling outward when the door is opened.

By this construction and arrangement, the same fire that is used for heating the tire may be used at the same time for heating the other work upon which the blacksmith may be engaged, so that the building of an extra fire is rendered unnecessary. By this arrangement, also, the forge-bellows can be used for increasing the intensity of the fire while heating the tires.

I claim as new, and desire to secure by Letters Patent-

1. Placing the tire-box B upon the forge A, and making it an integral part of the forge and chimney, sub-

stantially as herein shown and described, and for the purpose set forth.

2. The arrangement of the shifting-rollers CE in the annular tire-box B, whereby the smaller tire is hung upon the roller C in the upper part of the flue, and the larger tire rests upon and is operated by the roller E in the lower part of the flue, as herein described for the purpose specified.

3. The combination of the apron H with the lower part of the door G or tire box B, substantially as herein shown and described, and for the purpose set forth.

C. E. PIERCE.

Witnesses:

A. V. SILL,

F. Y. McCurdy.